Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

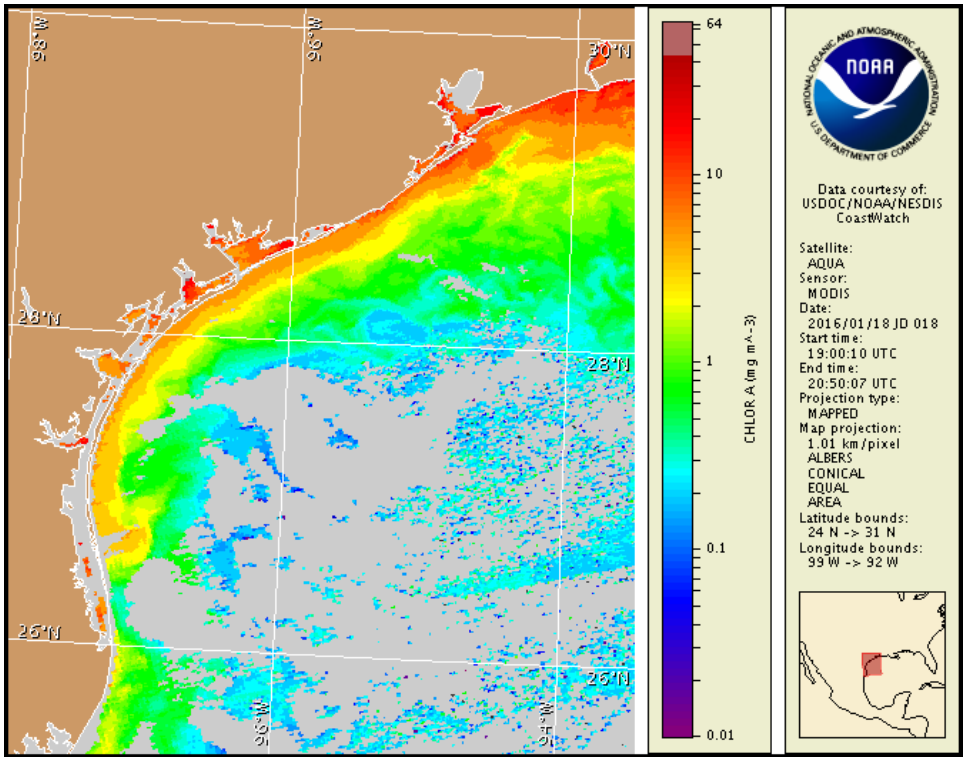
Tuesday, 19 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 11, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 9 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

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To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected Tuesday, January 19 through Monday, January 25.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

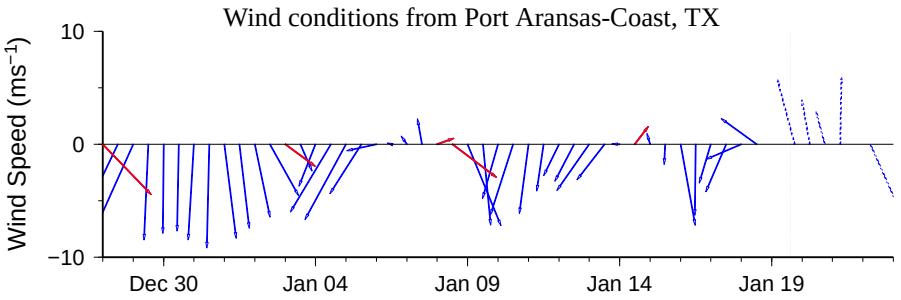
Analysis

Sampling from the Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates that *Karenia brevis* has decreased from 'very low b' concentrations identified last week (TAMU; 1/9-10). *K. brevis* now ranges between 'background' and 'very low a' concentrations (TAMU; 1/11-19). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

In recent MODIS Aqua imagery (1/18, shown left) patches of elevated to high chlorophyll (2-14 μg/L) are visible along- and offshore the Texas coast from Sabine Pass to the Padre Island National Seashore region. Elevated chlorophyll is not indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 20 km south from the Port Aransas region from January 18-22.

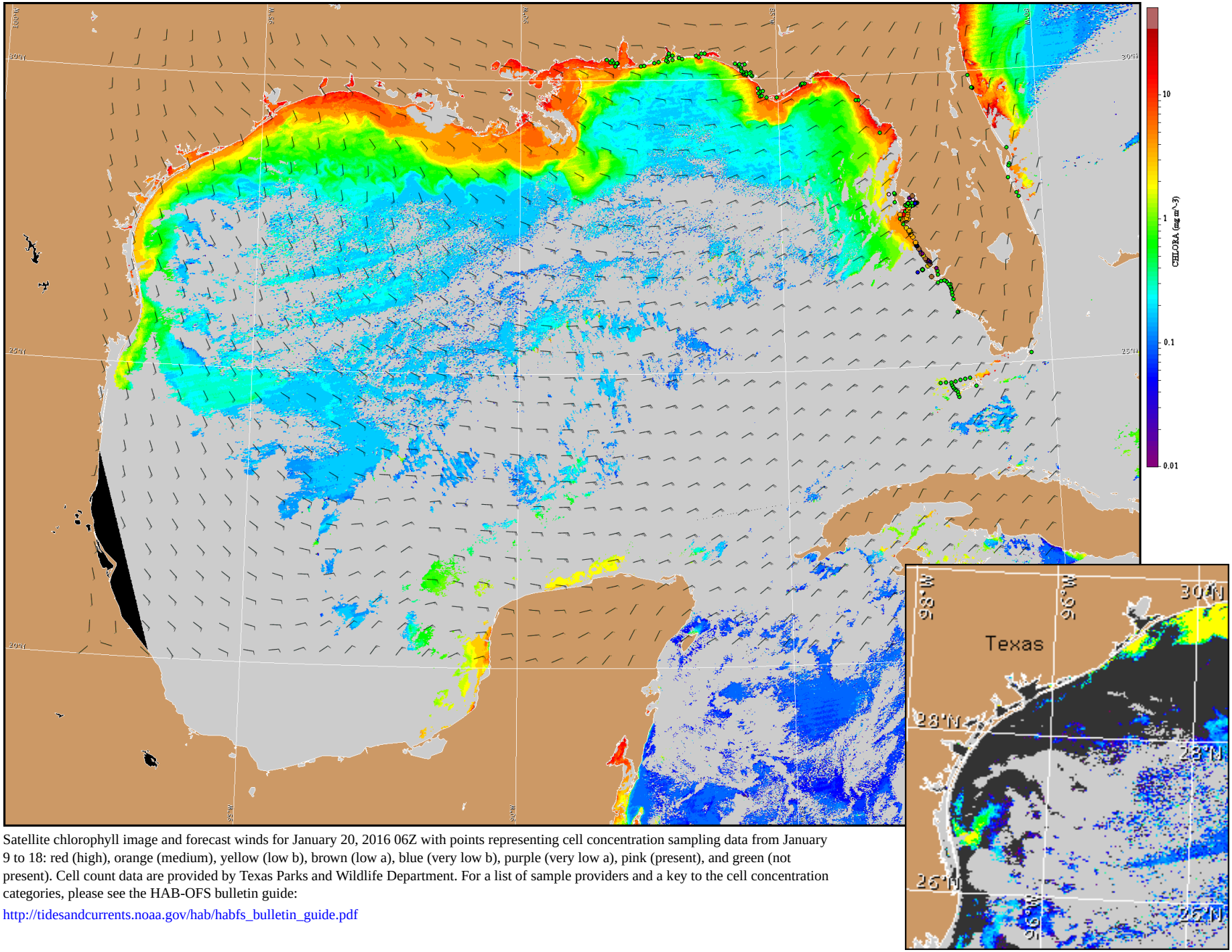
Kavanaugh, Yang



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Port Aransas to Baffin Bay: South winds (10-15kn, 5-8m/s) today through Wednesday night. Southwest to west winds (10-15kn) Thursday becoming north to northwest winds (10-25kn, 5-13m/s) Thursday night through Friday night. Northeast to east winds (5-10kn, 3-5m/s) Saturday becoming south winds (10-15kn) Saturday night.



Satellite chlorophyll image and forecast winds for January 20, 2016 06Z with points representing cell concentration sampling data from January 9 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).